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LETTER TRANSMITTING U S EPA REGION III'S COMMENTS ON DRAFT WORK PLAN AND SAMPLING AND ANALYSIS PLAN FOR SOIL AND GROUNDWATER BACKGROUND INVESTIGATION NAB LITTLE CREEK VA
10/22/1999
U S EPA REGION III

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION III**
**1650 Arch Street**
**Philadelphia, Pennsylvania 19103**

October 22, 1999

Mr. Robert Schirmer
Commander
LANTNAVFACENGCOM
Lafayett Annex, Bldg. A
6500 Hampton Blvd.
Norfolk, VA 23508-6287

SUBJECT: Draft Background WP/SAP
NAB Little Creek, Virginia

Dear Bob:

The following comments on the October 1999 draft Work Plan and Sampling and analysis Plan for Soil and Groundwater Background Investigation for Little Creek Amphibious Base, Virginia Beach, Virginia are made on behalf of the National Oceanic and Atmospheric Administration (NOAA).

1. On page 1-1, the Introduction (section 1.0) indicated that elevated concentrations of metals, VOCs, pesticides, and PAHs have been detected in soils and groundwater. Yet, the 1991 background study (paragraph 3 on page 1-1) indicated that only subsurface soils and groundwater samples were taken and that the subsurface soil analyses included metals and moisture; while the groundwater analyses included metals, organics, TPH, TOC, and TOX. Because this previous data set does not appear to have analyzed for all of the standard contaminants, there will be difficulty in utilizing these data to direct the current data collection effort. The use of these previous data needs to be more adequately discussed in this document.

2. On page 2-1, the statement is made (section 2.0 Sampling Rationale and Sampling Locations) that the specific goal is to establish background concentrations of metals, pesticides, and PAHs in surface and subsurface soils and groundwater. This document does not clearly indicate if the

list of potential contaminants has been limited to only these three categories of contaminants. If additional contaminants are discovered at individual sites and are not included in the background study then no relationship can be established.

3. On page 3-2 (first paragraph) the statement is made that only one CERCLA site is located in the soil type State Loam and Tetotum Loam, but "...the collection of...background samples from State and Tetotum soils is not considered warranted for this background investigation."
The reason for not including this soil type in the background study does not appear rigorous. The elimination of this soil type from the background study needs to be re-evaluated and the explanation needs to be rewritten.

4. In section 2.1 (Soil Sampling Locations), on page 3-2, the statement is made that surface soil samples will be from 0 to 0.5 feet and subsurface samples will be from 1 to 3 feet. A 2 foot composite sample will likely underestimate the maximum contaminant concentrations, therefore, the subsurface sample(s) need to be no more than half a foot in length. This may result in more than one subsurface soil sample being taken.

5. In section 2.2 (Groundwater Sampling Locations), page 3-4, the statement is made that "All background wells monitor groundwater in the shallow Columbia Aquifer at depths less than 20 feet." There is no reference to groundwater samples in deeper aquifers. This apparent omission needs to be adequately explained.

6. According to section 3.2.2 (Field Sampling Activities), page 3-6), there are to be 8 groundwater samples, 24 surface soil samples, and 24 subsurface soil samples. There is no indication that these sample sizes are sufficient to support the statistics proposed in this document. The justification for these samples sizes needs to be discussed in this section.

7. Regarding groundwater sampling, this document suggests that this is to be a one time event (see Table 3-1 on page 3-7). This data collection effort will not address seasonal variations in contaminant concentrations nor will it address tidal influences. These issues will need to be addressed.

Bruce W. Be
Remedi

cc: Robert Weld, VADEQ
Rich Hylton, NWS Yorktown
Scott MacEwen, CH2MHILL
Donna Caldwell, CH2MHILL